MIL-L-7961C 24 December 1993 SUPERSEDING MIL-L-7961B 4 June 1959

### MILITARY SPECIFICATION

## LIGHTS, INDICATORS, PRESS TO TEST

This specification is approved for use by all Departments and Agencies of the Department of Defense.

- 1. SCOPE
- 1.1 Scope. This specification covers functional, self-testing, press to test indicator lights.
- 1.2 Classification. Light assemblies shall be of the following classes as specified (see 6.2).

Class 1 - Light, Indicator Press to Test, Small (MS25041-1 to -13).

Class 2 - Light Assembly, Press to Test Indicator (MS25331-l to -0).

#### APPLICABLE DOCUMENTS

- 2.1 Government documents.
- 2.1.1 Specifications and standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

#### **SPECIFICATIONS**

Federal

PPP-B-556 Boxes, Folding, Paperboard PPP-B-635 Box, Shipping, Fiberboard

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Resources & Logistics Services Division, SA-ALC/TILDD, Bldg 171, Post C-12, 485 Quentin Roosevelt Rd, Kelly AFB, TX 78241-6425 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A FSC 6210

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# Military

MS25331

MIL-A-8625 MIL-C-25050 MIL-P-116	Anodic Coating for Aluminum and Aluminum Alloys. Color, Aeronautical Lights and Lighting Equipment, General Requirements For Preservation, Methods of
STANDARDS	
Military	
MIL-STD-129	Marking for Shipment and Storage
MIL-STD-130	Identification Marking of U.S. Military Property
MIL-STD-147	Palletized Unit Loads
MIL-STD-810	Environmental Test Methods & Engineering Guidelines
MIL-STD-889	Dissimilar Metals
MIL-STD-970	Standards and Specifications, Order of Precedence for the Selection of
MIL-STD-1186	Cushioning, Anchoring, Bracing, Blocking and Water-proofing, with Appropriate
	Test Methods
MIL-STD-2073	DOD Materiel Procedures for Development and Application of Packaging
	Requirements.
MS25041	Light, Indicator, Press to Test, Small
MS25231	Lamp Incandescent, Center Contact, Miniature Bayonet Base T-3-1/4 Bulb
MS25237	Lamp, Incandescent, Single Contact, Midget Flange Base T-1-3/4 Bulb

(Unless otherwise indicated, copies of federal and military specifications, and standards are available from the Naval Publications and Forms Center, 700 Robbins Avc., Philadelphia, PA 19111-5094.)

2.1.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

# AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

Light Assembly, Press to Test Indicator

ASTM D 3951 Standard Practice for Commercial Packaging

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia PA 19130.)

2.2. Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated detail specifications, specification sheets, or MS standards), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

## 3. REQUIREMENTS

- 3.1 MS sheets. The individual item requirements shall be as specified herein and in accordance with the applicable MS sheet. In the event of any conflict between the requirements of this specification and the MS sheet, the latter shall govern.
- 3.2 Qualification. Lights furnished under this specification shall be products which are authorized by the qualifying activity for listing on the applicable qualified products list (QPL) at the time of award of contract (see 4.4 and 6.3).
- 3.3 <u>Selection of specifications and standards</u>. Selection of specifications and standards for materials, parts, and Government certification and approval of processes and equipment which are not specifically designated herein and which are necessary for the execution of this specification, shall be selected in accordance with MIL-STD-970
- 3.4 <u>Materials</u>. Materials shall be as specified herein. However, when a definitive material has not been specified, a material shall be chosen of the quality used for the purpose in good commercial practice. Materials shall be free from all defects and imperfections that might otherwise affect the serviceability of the finished product.
- 3.4.1 <u>Commercial parts</u>. Commercial (non-standard) parts having suitable properties may be used where, on the date of invitation for bids, there are no suitable standard parts. In any case, commercial utility parts such as screws, bolts, nuts, washers, cotter pins, etc., having suitable properties may be used provided:
  - a. They can be replaced by the standard parts (AN, MS, or NAS) without alteration.
  - b. The corresponding standard part numbers are referenced in the parts list and on the contractors drawings.
- 3.4.2 <u>Fungus proof materials</u>. Materials that are nutrients for fungi shall not be used where it is practical to avoid them. Where used and not hermetically sealed, they shall be treated with a fungicide agent acceptable to the qualifying activity. However, if they will be used in a hermetically sealed enclosure, fungicide treatment will not be necessary.
- 3.4.3 <u>Metals</u>. Metals shall be corrosion resistant or treated to resist corrosion caused by fuels, salt spray, or atmospheric conditions as may be encountered in storage or normal service usage.
- 3.4.3.1 <u>Dissimilar metals</u>. Dissimilar metals as defined by MIL-STD-889, shall not be used in intimate contact with each other unless adequately protected against galvanic corrosion.
- 3.4.4 Recycled, reclaimed, or virgin materials. Recycled or reclaimed material may be used in lieu of virgin material provided that all the requirements of this specification are met and the material does not jeopardize the quality or life of the finished product.

- 3.5 <u>Design and construction</u>. The light assemblies with or without the dimming feature shall be designed and constructed in accordance with MS25041 or MS25331, as applicable.
  - 3.5.1 Mounting. The light assemblies shall be mountable on panels up to 0.375 inch thick.
- 3.5.2 <u>Lamp</u>. The light assemblies shall be designed to use a MS2523I-313S (28vdc) lamp having a length of 1.088 inches or a MS25237-327 (28vdc) lamp, as applicable. Unless otherwise specified, the lamp shall not included.
- 3.5.3 <u>Dimming</u> The design of the dimming feature shall be such that when the cap is turned to the full dim position a small diffused ring of light will be emitted through the lens.
- 3.5.4 Reliability. The light assemblies shall be so designed as to provide reliable operation throughout its normal life under all of the specified conditions.
- 3.5.5 <u>Circuit</u>. The circuits in each of the light assemblies shall be designed so that the Indicating circuit will be open before and during the time that the test circuit is closed and the test circuit shall be open before and during the time that the indicating circuit is closed.
- 3.5.6 <u>Insulation</u>. The light assemblies shall be so constructed as to provide an insulating factor between the terminals and the shell. The light assemblies shall incorporate an inner sheath of sufficient length so that when the lamp (or lamp holding shell in the case of MS25041 lights) Is inserted and removed, a short circuit between the exterior shell and the lamp socket cannot be made.
- 3.5.7 <u>Filters</u>. The light assemblies shall be furnished with glass or plastic filters of the color specified (see 6.2).
- 3.5.7.1 Colors. The colors specified (see 6.2) shall meet the requirements for identification colors as specified in MIL-C-25O50, except that for red, the minimum transmittance shall be 0.07, when tested with a light source having a color temperature of 2,355oK.
- 3.5.8 Weight. Each light assembly shall not exceed 0.04 pounds for assemblies included on MS2504l and 0.06 pounds for assemblies included on MS25331.
- 3.5.9 Finishes and protective coatings.
- 3.5.9.1 Finish. The aluminum or aluminum-alloy parts of the light assembly shall have an anodized finish in accordance with MIL-A-8625.
- 3.5.9.2 <u>Locknut and cover</u>. The visible locknut and cover shall have a dull black finish.
- 3.5.9.3 <u>Terminal strips</u>. The terminal strips shall be tinned.

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- 3.6 <u>Performance</u>. The light assemblies shall be capable of operating satisfactorily under the following conditions when tested as specified (see 4.6).
- 3.6.1 Environmental. The light assemblies shall perform satisfactorily when subjected to the following environmental conditions specified in MIL-STD-810.
- 3.6.1.1 <u>Fungus</u>. After extended, non-operating exposure to fungus conditions, the light assemblies shall be capable of satisfactory operation to determine conformance to the specified test procedure (see 4.6.2.1).
- 3.6.1.2 <u>Humidity</u>. After extended, non-operating exposure to a hot relative humidity up to 100 percent, Including conditions wherein condensation takes place in the form of both water and frost, the light assemblies shall be capable of satisfactory operation to determine conformance to the specified test procedure (see 4.6.2.2).
- 3.6.1.3 <u>Salt fog</u>. After extended, non-operating exposure to salt fog atmospheric conditions such as those encountered In areas of high saline content, the light assemblies shall be capable of satisfactory operation to determine conformance to the specified test procedure (see 4.6.2.3).
- 3.6.1.4 <u>Altitude</u>. After completion of the specified test procedure, remaining under test conditions, the light assemblies shall be capable of satisfactory operation as specified (see 4.6.2.4).
- 3.6.1.5 <u>Low temperature</u>. After non-operating exposure to the specified low temperature test procedure, the light assemblies shall be capable of satisfactory operation as specified (see 4.6.2.5).
- 3.6.1.6 <u>High temperature</u>. After completion of the specified test procedure, the light assemblies shall be capable of operating for a minimum of four (4) hours at the specified high temperature (see 4.6.2.6).
- 3.6.1.7 <u>Sand and dust</u>. After extended, non-operating exposure to sand and dust conditions such as those encountered in desert areas, the light assemblies shall be capable of satisfactory operation to determine conformance to the specified test procedure (see 4.6.2.7).
- 3.6.1.8 <u>Vibration</u>. After extended, non-operating exposure to vibration conditions such as those encountered in off-road vehicle use, shipboard, or normal aircraft service, the light assemblies shall be capable of satisfactory operation to determine conformance to the specified test procedure (see 4.6.2.8).
- 3.6.2 <u>Pressure resistance</u>. The light assemblies mounted on a suitable panel shall operate satisfactorily after being subjected to a pressure of 200 pounds as specified (see 4.6.3).
- 3.6.3 Press to test operation. The light assembly shall be such that when tested by pressing on the cap of the assembly, thereby closing the circuit, the lamp shall light indicating the circuit is operative. When pressure is released, the test circuit to the lamp shall be opened and the cap shall be returned to its normal position. The light assembly, excluding lamp, shall be capable of withstanding the required cycles when tested as specified (see 4.6.4).

- 3.6.4 <u>Shutter operation</u>. The light assembly shutter shall be capable of operation for 5000 cycles when tested as specified (see 4.6.5).
- 3.6.5 <u>Dielectric insulation</u>. The light assemblies shall be insulated so that terminals are isolated from the exterior shell. The light assemblies shall incorporate an insulating inner sheath of sufficient length so that when the lamp (or lamp holding shell in the case of MS 25041 lights) is inserted and removed, a short circuit between the exterior shell and the lamp socket cannot be made when tested as specified (see 4.6.6).
- 3.7 <u>Identification of product</u>. Unless otherwise specified on the detail specification or MS sheet, all items shall be marked for Identification in accordance with MIL-STD-13O. Markings shall be clear, legible, and durable (see 4.6.1).
- 3.7.1 <u>Specification reference number</u>. The specification reference number shall be the MS sheet part number and used as part of the MIL-STD-130 identification on the product if it is large enough and on the immediate exterior container if it is to small.
- 3.8 Anti-counterfeiting protection. When it has been determined that the Item is susceptible to be counterfeited by either alteration, duplication, or simulation, the product shall be protected in such a manner as to allow it to be traced to the true manufacturer and authenticated as their product. The manner of this protection shall be proprietary to the true manufacturer and released only to the final procuring activities quality assurance department by secure means.
- 3.9 Workmanship. Each item, Including all parts and accessories, shall be fabricated and finished, free of blemishes and defects which will adversely affect its life, form, fit, or function. All soldering, welding, brazing, grinding, cuts, shall be accurate and clean. All edges, corners, and exterior hardware shall be free from burrs, sharp edges, corrosion, or any other defect which would affect the safety of personnel handling the product (see 4.6.1).

## 4. QUALITY ASSURANCE PROVISIONS

- 4.1 <u>Responsibility for inspection</u>. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.
- 4.1.1 <u>Responsibility for compliance</u>. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractors overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements, however, this does not

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uthorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material.

- 4.2 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
  - a. Qualification inspection (see 4.4).
  - b. Quality conformance inspection (see 4.5).
- 4.3 <u>Inspection conditions</u>. Unless otherwise specified (see 6.2) all Inspections shall be performed in accordance with the applicable test conditions specified in MIL-STD-810.
- 4.4 Qualification inspection. Qualification inspection shall be performed at a laboratory acceptable to the Government qualifying activity (see 6.3), on sample items produced with equipment and procedures normally used in production. If the product is later modified in any way, the modified form shall be subjected to and shall pass the same qualification tests.
- 4.4.1 Qualification sample. The qualification test sample shall consist of five (5) light assemblies. The test samples shall be marked with the manufacturer's own part number and any additional information required by the letter of authorization. The test samples shall be subjected to and pass all the inspections of section 4.

## 4.4.2 FAILURES.

- 4.4.2.1 <u>Test sample failures</u>. Failure of any items in the test sample to conform to the requirements specified herein shall be cause for not granting qualification approval. The qualifying activity shall be notified when an unrelated failure occurs and reserve items are used, prior to the continuance of testing. Lamp failure not caused by a malfunction of the assemblies shall not be cause for rejection.
- 4.4.3 <u>Retention of qualification</u>. To retain qualification, the manufacturer shall forward a report at twelve (12) month intervals to the qualifying activity (see 6.3). The qualifying activity shall establish the initial reporting date and the report which shall consist of:
- a. A summary of the results of the tests performed for examination of product and packaging for delivery, Indicating as a minimum the number of lots that have passed, the number that have failed, and the tests that were failed. The results of the, tests of all reworked lots shall be Identified and accounted for.
- b. A summary of the results of tests performed for periodic inspection, including the number and mode of failures. The summary shall Include results of all periodic inspections performed and completed during the preceding twelve (12) month period. If the summary of the test results indicates non conformance with the specification requirements, and corrective action acceptable to the qualifying activity has not been taken, action may be taken to remove the failing product from the QPL.
- c. Failure to report within 30 days after the end of each twelve (12) month period may result in the loss of qualification for the product. In addition to the periodic submission of inspection data, the contractor

shall immediately notify the qualifying activity at any time during the twelve (12) month that the inspection data Indicates failure of the qualified product o meet the requirements of this specification.

- d. In the event that no production occurred during the reporting period, a report shall be submitted certifying that the manufacturer still has the capabilities and facilities necessary to produce the item. If during two consecutive reporting periods there has been no production, the manufacturer may be required, at the discretion of the qualifying activity, to submit his qualified products for testing in accordance with the qualification inspection requirements, and the reason for negative production during that time.
  - 4.5 QUALITY CONFORMANCE INSPECTION.
- 4.5.1 <u>Sampling</u>. Sampling from each lot for examination and inspection shall e established by the procuring activity.
- 4.5.1.1 <u>Inspection lot</u>. All items of the same type, class, and size offered for delivery at one time, from one manufacturer and from one plant location, shall be considered a lot for purposes of Inspection.
- 4.5.2 Examination. The samples selected in accordance with 4.5.1 shall be examined for compliance with the requirements specified In section 3 of this specification.
- 4.5.3 <u>Inspections</u>. Quality conformance inspections shall consist of all the inspections specified in 4.6. Presence of two minor defects from test 4.6.1 or one major defect from tests 4.6.1.1 through 4.6.2.8, or any combination thereof on the inspected Items shall be cause for rejection.
- 4.5.4 Noncompliance. If a sample fails to pass the inspection, the manufacturer shall notify the qualifying activity and the cognizant inspection activity of such failure and take corrective action on the materials or processes, or both, as warranted, and on all units of the product which can be corrected and which were manufactured with essentially the same materials and processes, and which are considered subject to the same failure. Acceptance and shipment of the product shall be discontinued until corrective action, acceptable to the qualifying activity has been taken. After corrective action has been taken the inspections shall be repeated on additional sample units (all tests and examinations, or the test which the original sample failed, at the option of the qualifying activity). Complete Inspections may be re instituted; however, final acceptance and shipment shall be withheld until the inspections have shown that the corrective action was successful. In the event of failure after re inspection, information concerning the failure shall be furnished to the cognizant inspection activity and the qualifying activity.
- 4.5.5 <u>Disposition of samples</u>. Samples which have been subjected to the qualification inspection shall not be delivered to the Government on contract or purchase, order unless a specific exception has been granted by the cognizant procuring activity.
  - 4.6 TEST METHODS AND EXAMINATIONS.
- 4 6.1 Examination of product. Each light assembly shall be inspected or examined to determine compliance with the requirements specified herein with respect to design and construction, materials,

marking, and workmanship.

- 4.6.1.1 Operation. The light assemblies shall be tested for operation by installing the specified lamp and applying the design voltage (28 vdc) across the terminals. The press to test feature shall also be tested for operation. If the light has the dimmer feature, the dimmer shall also be tested for operation. Failure of any component (exclusive of the lamp) of the light assembly during shall be cause for rejection.
- 4.6.2 Environmental. The light assemblies shall be subjected to the following tests In accordance with the specified procedures of MIL-STD-810 and as specified herein. Upon completion of each test, any damage which would affect the operation or cause malfunction of the unit shall be cause for rejection. Unless otherwise specified the assemblies shall be mounted on a panel that will allow the indicator circuit to be energized to 28 vdc for all tests.
- 4.6.2.1 <u>Fungus</u>. The light assemblies, non energized, shall be subjected to fungus in accordance with Method 508.3, MIL-STD-810. Evidence of excessive fungi growth or malfunctioning of the assemblies shall be cause for rejection.
- 4.6.2.2 <u>Humidity</u>. The light assemblies, non energized, shall be subjected to relative humidity of 100 percent, including conditions wherein condensation takes place in the form of both water and frost, in accordance with Method 507.2, Procedure III, MIL-STD-810, for a period of 10 cycles. Any loosening or deformation of parts or discoloration of the lens during this test shall be cause for rejection.
- 4.6.2.3 <u>Salt fog</u>. The light assemblies, non energized, shall be subjected to salt fog for a period of 100 hours in accordance with Method 509.2, Procedure I, MIL-STD-810. Evidence of excessive corrosion or malfunctioning of the assemblies shall be cause for rejection.
- 4.6.2.4 <u>Altitude</u>. The light assemblies shall be subjected to altitude in accordance with Method 500.2, Procedure II, MIL-STD-810, except that the ambient temperature shall be -73°C and a pressure altitude ranging from 30 inches Hg down to 3.4 inches Hg (approximately an altitude of 70,000 feet). The assemblies shall be connected for operation on a 28 vdc circuit, but shall not be energized during a soak period of not less than one (I) hour for stabilization of the temperature. After the soak period and at the required test conditions, the assemblies shall be cycled four (4) times with 5-minute on and 5-minute off periods.
- 4.6.2.5 <u>Low temperature</u>. The light assemblies, non energized, shall be subjected to basic cold temperature in accordance with Method 502.2, Procedures I & II, MIL-STD-810, except that the temperature attained during the initial soak period shall be -73 C.
- 4.6.2.6 <u>High temperature</u>. The light assemblies, energized, shall be subjected to three (3) basic hot temperature cycles in accordance with Method 501.2, Procedure II, MIL-STD-81O, except that the maximum temperature for each cycle shall be +71 C. The light assemblies shall then be operated for a period of four (4) hours. Any damage or discoloration of the lens as a result of this test shall be cause for rejection.
- 4.6.2.7 Sand and dust. The light assemblies, non energized shall be subjected to 24 hours of sand and dust in accordance with Method 510.2, Procedure I, MIL-STD-810. Each assembly shall be so located that the

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sand and dust does not impinge directly on it. Any damage which causes a malfunction of the assemblies shall be cause for rejection.

- 4.6.2.8 <u>Vibration</u>. The light assemblies, non energized, shall be subjected to vibration in accordance with Method 508.3, MIL-STD-810. Any damage which causes a malfunction of the assemblies shall be cause for rejection. Any failure of the lamp which is not caused by a malfunction of the assembly is not cause for rejection.
- 4.6.3 <u>Pressure resistance</u>. One (1) light assembly, non energized, shall be separately mounted on a suitable panel and a force of 200 pounds applied to the dimmer cover. Evidence that the phenolic base housed In the barrel has been forced out or that the assembly has been damaged or malfunctions shall be cause for rejection.
- 4.6.4 <u>Press to test operation</u>. The light assemblies, non energized, shall have a 30 pound force applied to the lens cap in the normal direction of operation of the test sequence for a total of 3,000 cycles. The force shall be applied gradually and at a rate not to exceed 10 times per minute. Evidence of damage or malfunction of the assembly shall be cause for rejection.
- 4.6.5 <u>Shutter</u>. The dimmer light assemblies, energized, shall have the dimmer cover subjected to 5,000 cycles of operation from the extreme dim to the extreme bright positions. Failure of any component to complete the required number of CYCLES without breakage, exclusive of the lamp, shall be cause for rejection.
- 4.6.6 <u>Dielectric insulation</u>. The light assemblies shall be removed from the power circuit, have the lamp removed, and shall be subjected to the application of a 500 vrms, 60 cycle potential for one (1) minute between each terminal and the mounting plate and then between the terminals. Evidence of damage or malfunction of the assembly after this test shall be cause for rejection.
- 4.7 <u>Inspection of packaging</u>. The sampling and inspection of the preservation, packing, and container marking shall be in accordance with the requirements of MIL-P-116 and section 5.
  - PACKAGING.
- 5.1 <u>Preservation and packaging</u>. The preservation and packaging shall be level A, or Commercial, as specified (see 6.2)
- 5.1.1 <u>Level A.</u> Unless otherwise specified, the light assemblies shall be Individually preserved and packaged in conformance with Method IC-1 of MIL-P-116 without a contact preservative. Each sealed bag shall be placed in an individual paperboard box conforming to PPP-B-566 or equal.
- 5.1.2 <u>Commercial</u>. The light assemblies shall be preserved and packaged in conformance with ASTM-D-3951.
- 5.2 Packing. Packing shall be level A, B, C or Commercial, as specified (see 6.2.1).

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- 5.2.1 <u>Level A</u>. Light assemblies shall be packed in a container conforming to PPP-B-621, Class 2, Overseas.
- 5.2.2 <u>Level B</u>. Light assemblies shall be packed in a container conforming to PPP-B-636, Class Weather resistant
- 5.2.3 Level C. Light assemblies shall be packed in a container conforming to PPP-B-636, Class Domestic.
- 5.2.4 Commercial. Light assemblies shall be packed in conformance with ASTM-D-3951.
- 5.3 Physical protection. The light assemblies packed as specified in 5.2.1 and 5.2.2 shall be cushioned, blocked, and braced in accordance with the requirements of MIL-STD-1186.
- 5.4 <u>Marking</u>. In addition to any special marking requirements in the contract or purchase order, interior packages and shipping containers shall be legibly marked in accordance with the requirement of MIL-STD-129.
- 5.4.1 <u>Anti-counterfeit marking</u>. When an item has been deemed to be susceptible to counterfeiting, each item or individual sealed package shall be marked in such a manner as to provide the contracting activity with an authentication and traceability track to the true manufacturer. The method in which this is done shall be proprietary to the true manufacturer and provided to the quality assurance office of the contracting activity by secure means.
- 5.5 <u>Palletization</u>. When unitized loads, commensurate with the level of packing, are specified, they shall be palletized in accordance with MIL-STD-147. Palletized loads shall be uniform in size and quantities, to the greatest possible extent possible. If the container is of a size which does not conform o any of the pallet patterns specified In MIL-STD-147, the pallet pattern used shall first be approved by the contracting officer.
- 6. Notes.

(This section contains Information of a general or explanatory nature that may be helpful, but Is not mandatory.)

- 6.1 <u>Intended use</u>. The light assemblies are intended for use as warning indicator lights to be used in conjunction with a component of an electrical system to indicate a functional operation.
- 6.2 ORDERING DATA
- 6.2.1 Acquisition requirements. Acquisition documents should specify the following:
  - a. Title, number, and date of this specification.
  - b. Class and MS part number (see 1.2 and applicable MS sheet).
  - c. When lamps shall be furnished (see 3.5.2).
  - d. Levels of preservation, packaging, and packing required (see 5.1 and 5.2).

- e. When palletized loads are required (see 5.5).
- 6.3 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Products List (QPL-7 61), whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the product that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or purchase orders for the products covered by this specification. The activity responsible for the Qualified Products List is The Engineering Department, SA-ALC/TILDD, Kelly AFB TX 78241 and information pertaining to qualification of products may be obtained from that activity.
- 6.4 <u>Definition</u>. For purposes of defining various types of defects or terminology which Is referred to in this specification, the following definition will apply:

Amplitude - Amplitude is defined as the total movement measured from one extreme position to the opposite extreme position.

6.5 Subject term (key word) listing.

Indicator, light assembly Light assembly, press to test Light assembly, Indicator Press to test light assembly Dimmer light assembly

6.6 <u>Changes from previous issue</u>. Asterisks or vertical lines are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Air Force - 99

Army - ME

Navy - AS

Review activities:

Air Force - 11

Army - AR, AV, MI

Navy - SH

DLA - GS

Preparing activity:

Air Force - 82

Agent activity:

Air Force - 99

(Project 6210-1042)

4 1.1 HUBBLUILLY. THE LEGIC SHALL SE SECTION